

WHAT IS CLAIMED IS:

1. An active matrix liquid crystal display device comprising:
- a first substrate and a second substrate, at least one of the first and second substrates being transparent;
 - a liquid crystal layer put between the first and second substrates;
 - a color filter,
 - said first substrate including a plurality of scanning lines;
 - a plurality of signal lines crossing the scanning lines in a matrix manner;
 - a plurality of thin film transistors formed at intersections of the scanning lines and signal lines, respectively;
 - a pixel electrode connected to said plurality of thin film transistors,
 - said second substrate including a counter electrode, liquid crystal molecules being driven by an electric field between said pixel electrode and said counter electrode to thereby make display, wherein
 - said color filter is formed on a passivation film for protecting said thin film transistors;
 - said pixel electrode is arranged on said color filter and connected to said thin film transistors through a contact hole provided in said passivation film and said

1 2. An active matrix liquid crystal display device
2 comprising:

5 a liquid crystal layer put between the first and
6 second substrate;

an overcoat layer protecting said color filter, said first substrate including a plurality of scanning lines;

0 a plurality of signal lines crossing the plurality of
1 scanning lines in a matrix manner;

2 a plurality of thin film transistors formed at
3 intersections of the scanning lines and the signal lines,
4 respectively;

3 a pixel electrode connected to said thin film
5 transistors, said second substrate including a counter
7 electrode, liquid crystal molecules being driven by an

electric field between said pixel electrode and said counter electrode to thereby make display, wherein

said color filter is formed on a passivation film for protecting said thin film transistors;

22 said overcoat layer is formed on said color filter;
23 said pixel electrode is arranged on said overcoat
24 layer and connected to said thin film transistors through a
25 contact hole provided in said passivation film, said color
26 filter and said overcoat layer; and
27 gate insulating layers of said thin film transistors
28 and said passivation film are removed in a light
29 transmission region within pixels surrounded by said
30 scanning lines and said signal lines.

31 3. An active matrix liquid crystal display device according
32 to claim 1 or 2,

33 wherein the color filter around said contact hole is
34 thinner than the color filter in said light transmission
35 region.

36 4. An active matrix liquid crystal display device according
37 to claim 1 or 2,

38 wherein said color filter consists of an organic film,
39 a difference in level generated on a surface of the organic
40 film being not more than 0.3 μm .

41 5. An active matrix liquid crystal display device according
42 to claim 1 or 2,

43 wherein said color filter is made of a photosensitive
44 acrylic resin having pigment dispersion property.

2 crystal display device, the method comprising the steps of:

3 forming a plurality of scanning lines on a first
4 substrate;

5 forming a plurality of signal lines crossing the
6 plurality of scanning lines in a matrix manner;

forming a plurality of thin film transistors at intersections of the plurality of scanning lines and the plurality of signal lines, respectively;

forming a pixel electrode connected to said thin film transistors;

forming a counter electrode on a second substrate;
injecting liquid crystal between said first substrate
and said second substrate and sealing the liquid crystals,

wherein said method further comprising the steps of:
forming a passivation film to protect each of said
thin film transistors;

removing part of a gate insulating layer and said passivation film of each of said tin film transistors in a region surrounded by said signal lines and said scanning lines;

forming a color filter made of a photosensitive color resist;

forming an overcoat layer on said color filter;
patterning said overcoat layer;

forming a contact hole by patterning said color filter while using said overcoat layer as a mask; and